

Appendix A. Background Information on the Fishery Management Plan for the Fisheries of the Western Pacific Region.

1. Principles of the Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended, is the principal federal statute governing the management of U.S. marine fisheries. The MSA's purpose and policy statements (§2(b)-(c)), elaborated upon through a declaration of ten National Standards, serve as the overarching objectives for fishery conservation and management (§301(a)) (Table A-1 lists these National Standards). Although it has been amended frequently since 1976, most recently by the 2000 Shark Finning Prohibition Act (H.R. 5461), several basic principles of the MSA have not changed over the course of its amendment history. These include the preeminent principle that the biological conservation of a fishery resource has priority over use of that resource. A second basic principle is that conservation and management decision making must be based on the best available scientific information, and, moreover, that this information includes social, economic and ecological factors along with biological factors.

Table A-1: MSA National Standards (16 U.S.C. 1851, Sec. 301(a)).

(1)	Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.
(2)	Conservation and management measures shall be based upon the best scientific information available.
(3)	To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.
(4)	Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.
(5)	Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.
(6)	Conservation and management measures shall take into account and allow for variations among, and contingencies in fisheries, fishery resources, and catches.
(7)	Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication
(8)	Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (E to the extent practicable, minimize adverse economic impacts on such communities.
(9)	Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.
(10)	Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

The law created eight regional fishery management councils (FMCs), whose statutory and appointed members are meant to represent a range of interests related to resource use, management, and conservation. The council system both decentralizes policymaking and facilitates substantial stakeholder participation.

A fishery management council's main responsibility is to prepare fishery management plans (FMPs) for "each fishery under its authority that requires conservation and management" (§302(h)(1)). The MSA also authorizes various support bodies for fishery management councils that carry out the technical details of the FMP process. These bodies include a Scientific and Statistical Committee (SSC), comprised of technical experts from state, federal and regional agencies; advisory panels representing sectoral and community interests and, specifically, a fishery industry advisory panel; and plan teams, responsible for initial development and ongoing monitoring of particular FMPs. This support structure of advisory bodies and professional staff gathers and analyses relevant data, and in dialog with council members formulates and evaluates policy alternatives. The council is the final arbiter; it makes policy decisions based on member voting during its public meetings. These public meetings, held quarterly, also provide an opportunity for public comment and input.

2. Western Pacific Pelagics FMP

The Western Pacific Pelagics FMP (Pelagics FMP) was implemented in 1987 (52 FR 5987, March 23, 1987). It replaced a Preliminary Fishery Management Plan (PMP) prepared by NMFS on behalf of the Secretary of Commerce and implemented in 1980. Effective pelagic fishery management was difficult at that time because the U.S. did not recognize coastal state jurisdiction over tuna species. Management authority extended only to non-tuna "highly migratory species," primarily billfish, that were incidentally caught in distant water longline fisheries. Despite this lack of jurisdiction, foreign fishing largely ceased in the central and western Pacific portions of the Exclusive Economic Zone (EEZ) with implementation of the PMP. Proposed management measures in the FMP focused on data collection from foreign vessels while relying on existing state data collection programs for domestic fisheries. U.S. tuna policy changed in 1992 with an amendment to the Magnuson Fishery Conservation and Management Act recognizing jurisdiction over tuna; also in 1992, Amendment 6 brought tuna under FMP management.

Most management measures implemented subsequent to the Pelagics FMP have been in response to the rapid growth in the Hawai'i-based longline fishery, which took off soon after FMP implementation. This growth mainly stemmed from an influx of vessels leaving mainland U.S. fisheries, in particular a fleet of converted shrimp trawlers from the Gulf of Mexico. Between 1987 and 1991, when an emergency rule established an entry moratorium (later converted to a limited entry program by Amendment 7), the number of active vessels increased more than four-fold. In addition, these new entrants were larger and had more capacity than older Hawai'i vessels. Gear conflicts between longliners and local small-boat fishermen escalated, especially in nearshore leeward waters of the Main Hawaiian Islands. Although these longliners also fished farther offshore—often outside the Hawai'i EEZ altogether — small boat fishermen were concerned that they might be intercepting fish migrating towards

1 inshore areas, thus reducing opportunities for inshore recreational, charter and commercial fishermen. 2 As a result, the Pelagics FMP was amended to address these concerns (see Section 2 below). 3 4 a. Management Objectives of the Pelagics FMP 5 6 The objectives of the Pelagics FMP, as provided in Amendment 1, are: 7 8 1. To manage fisheries for pelagic management unit species (PMUS) in the Western Pacific 9 Region to achieve optimum yield (OY). 10 11 2. To promote, within the limits of managing at OY, domestic harvest of the PMUS in the western 12 Pacific EEZ and domestic fishery values associated with these species, for example, by 13 enhancing the opportunities for: 14 15 Satisfying recreational fishing experiences; a. Continuation of traditional fishing practices for non-market personal consumption and 16 b. cultural benefits: and. 17 18 Domestic commercial fishermen, including charter boat operations, to engage in c. 19 profitable fishing operations. 20 21 3. To diminish gear conflicts in the EEZ, particularly in areas of concentrated domestic fishing. 22 23 4. To improve the statistical base for conducting better stock assessments and fishery evaluations, 24 thus supporting fishery management and resource conservation in the EEZ, and throughout the 25 range of the PMUS. 26 27 5. To promote the formation of a regional or international arrangement for assessing and 28 conserving the PMUS throughout their range. 29 6. 30 To preclude waste of PMUS associated with longline, purse seine, pole-and-line or other 31 fishing operations. 32 33 7. To promote, within the limits of managing at OY, domestic marketing of the PMUS in 34 American Samoa, Guam and Hawai'i. 35 36 The Pelagics FMP includes a procedure through which regulatory adjustments can be proposed by the Council for approval and implementation by NMFS. Eight amendments were approved between 1987 37 38 and 1999 and, in the past year, three more adjustments have been submitted for action by NMFS. The 39 adjustment process begins with identification of problems and issues that demonstrate that the FMP's objectives are not being acheived and, therefore, may need management attention and analysis of 40 alternative solutions. 41 42

b. Issues Addressed in Pelagics FMP Amendments

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FMP amendments, some of which made permanent measures that had already been implemented by emergency rules, address several issue areas. Appendix 1-11 of the Draft Environmental Impact Statement (DEIS) for the Western Pacific Pelagics FMP (NMFS 2000) contains a detailed discussion of the FMP amendments.

i. Number of participants in the Hawai'i-based longline fishery

Several amendments have been passed which limit the growth in the number of participants in the Hawai'i-based longline fishery¹. Amendment 2 required fishery participants to obtain a federal permit and maintain logbooks. Amendment 4 established a three-year entry moratorium, beginning in June, 1991². Amendment 7, implemented in 1994, established a limited entry permit program, supplanting the moratorium. This fixed the number of permits at 164 but made them transferable, allowing potential entrants to purchase an available permit from someone exiting the fishery. Amendment 7 also made vessels longer than 101 ft ineligible for permits. This was the size of the largest vessel prior to the moratorium established under Amendment 4.

ii. Gear conflicts

Rapid growth in the longline fleet has also resulted in fishery competition and occasionally gear conflicts or area preemption. Pooley (1990) identified three factors that exacerbated the conflict: the "new" longliners (1) set their gear shallower than traditional operations, catching more yellowfin tuna and marlins; (2) oriented their longlines perpendicular to the direction that the old sampan fleet deployed their lines; and (3) set their gear 20-30 miles from shore and near fish aggregating devices (FADs), areas frequented by trollers. In 1992 Amendment 5 created a closed area around the main Hawaiian Islands and Guam, extending and making permanent regulations established by emergency rule. A similar issue has arisen recently in American Samoa where the longline fishery employs relatively small "alia" catamarans. Local concern has focused on the possibility that if restrictions are placed on the Hawai'i longline fishery, some of these larger vessels may move to American Samoa. A regulatory amendment closing nearshore areas in American Samoa to longline vessels longer than 50 ft has been in preparation for some time. Formulation of the measure is complicated because some American Samoan entrepreneurs and current fishery participants have been upgrading to larger boats that exceed 50 ft. Any measure must balance the desire to exclude large vessels with the possibility that participants may want to reinvest and expand operations.

iii. Interactions between longliners and protected species

¹Under the Pelagics FMP, "longline" gear means a mainline 1 mile or longer in length, suspended in the water column, to which are attached branch (also called dropper or gangion) lines with hooks. When used in the longline closed areas around the northwestern Hawaiian Islands, the definition is the same except that in those areas a "longline" consists of a mainline of <u>any length</u> (i.e., even mainlines less than 1 mile are prohibited).

²The moratorium and subsequent limited entry program use a "control date" of December 5, 1990. To be eligible, boats had to have participated in the fishery prior to that date.

During the initial phase of the Hawai'i-based longline fishery, boats fished near the Northwestern Hawaiian Islands (NWHI), a chain of largely uninhabited islets, atolls and banks extending northwest from the main Hawaiian Islands. These islands comprise the main terrestrial habitat of monk seals (Monachus shauinslandi), with the largest population occupying French Frigate Shoals (Diaz-Soltero, 1998). Monk seals declined significantly in number from the late 1950s, when the population was first surveyed yearly, through the 1970s, although there is evidence to suggest that the population was adversely affected by human activities since the turn of the century (NMFS, 1983). There have been fluctuations in population size since then due to a number of factors including human disturbance, reduced prey availability, shark predation, mobbing, and entanglement in marine debris. However, populations seem to have stabilized since the mid-1990s. There was some evidence in the early 1990s that longliners were adversely affecting the seals, as indicated by the sighting of a few animals ensnared by fishhooks and exhibiting other non-natural injuries. Amendment 2 required longline permit holders to notify NMFS if intending to fish within 50 miles of any NWHI and required all vessel operators to attend a training session. These measures were later deemed insufficient, and in 1991, Amendment 3 established a permanent 50-mile protected species zone around the NWHI, originally established by emergency rule, closing the area to longline fishing. There has been no evidence of longline interaction with monk seals subsequent to this regulation.

More recently, resource managers and conservationists have become concerned about seabird mortality that results when birds dive on the baited hooks being payed out from longline vessels during gear deployment. The black-footed (*Phoebastria nigripes*) and Laysan (*P. immutabilis*) albatross are the main species affected, with respectively an estimated 1,175 and 1,388 birds killed each year (McCracken, 2000). These birds are not listed under the Endangered Species Act but are protected by the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) on shore and seaward to 3 nm. A pending regulatory amendment requires Hawai'i longline permit holders to employ two or more of a suite of mitigation measures when fishing north of 25E N. latitude. A final Biological Opinion for the endangered short tail albatross (*P. alabatrus*) (U.S. Fish and Wildlife Service 2000) and a national plan of action developed under a Food and Agriculture Organization-Committee on Fisheries (FAO-COFI) initiative should help to reduce seabird mortality in advance of amendment implementation.

3. Fisheries Under the Western Pacific Pelagics FMP

Pelagic fishing has a long history in the Pacific basin but major development of distant water fishing occurred after World War II. These fisheries primarily target various tuna species, with skipjack (*Katsuwonus pelamis*) and yellowfin (*Thunnus albacares*) the most commonly caught species. Bigeye tuna (*T. obesus*), although a less important component of Western Pacific landings, is the main target species in the Hawai'i longline fishery.

U.S. fishing vessels engage in a variety of pelagic fisheries in the eastern, central and western Pacific Ocean. Pelagic fishing activities conducted in the EEZ around U.S. islands in the western Pacific are managed under the Pelagics Fishery Management Plan (FMP) prepared, monitored and adjusted, as necessary, by the Western Pacific Regional Fishery Management Council (the Council). These fisheries

are profiled in Table A-2 according to methods, number of active vessels, areas fished and applicable management regimes.

Table A-2: Status of U.S. Pacific pelagic fisheries – 1999. Source: WPRFMC; NMFS SWFSC.

Fishing method	No. of active vessels		Management			
and location		State/Territ. Waters	Western Pacific EEZ	Pacific Coast EEZ	Other	Regime
Tuna purse seine (central and western Pacific)	35		A. Samoa, U.S. Pacific remote islands		High seas EEZs of Pacific island nations	Western Pacific Pelagics FMP High Seas Compliance Act South Pacific Tuna Treaty
Hawai'i tuna and swordfish longline	100+		Hawai'i		High seas	Western Pacific Pelagics FMP State of Hawai'i landing laws
American Samoa longline	24		A. Samoa		One vessel has access agreements with neighboring island states	Western Pacific Pelagics FMP A. Samoa vessel registration law In other EEZs, per access agreements
North Pacific albacore troll	600+		Hawai'i	X	High seas	Western Pacific Pelagics FMP High Seas Compliance Act
Hawaiʻi pole-and- line	5	Hawai'i	Hawai'i			Western Pacific Pelagics FMP State of Hawai'i laws and regulations
Hawaiʻi troll, handline and charter	Several thousand	Hawai'i	Hawai'i			Western Pacific Pelagics FMP State of Hawai'i laws and regulations

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Fishing method	No. of active vessels		Management			
and location		State/Territ. Waters	Western Pacific EEZ	Pacific Coast EEZ	Other	Regime
American Samoa troll, handline	28	A. Samoa	A. Samoa			Western Pacific Pelagics FMP A. Samoa vessel registration law
Guam troll, handline	449	Guam	Guam			Western Pacific Pelagics FMP Guam vessel registration law
CNMI troll, handline	106	CNMI	CNMI			CNMI vessel registration law
Remote U.S. Pacific island possessions troll, handline	10+		Midway, Palmyra, Kingman Reef, Johnston and Wake			Western Pacific Pelagics FMP

The largest domestic fishery, measured by landing weight, managed under the Pelagics FMP is the longline fishery; the pole-and-line fishery was historically dominant but has declined in recent years and somewhat stabilized at a low level of effort. The other main domestic fishery types in the Council region are troll and handline³. Fishery participants using these gear types may be recreational fishers, charter boats or commercial operations. The recreational sector overlaps somewhat with the commercial due to so-called "expense" fishermen, who sell some proportion of their catch to cover operating costs. Table A-3 summarizes 1998 landings by fishery type and area. As can be seen from the table, the Hawai'i-based longline fishery is by far the largest, with troll fisheries a distant second. Within the Council region, Hawai'i accounts for the most landings, even if the longline fishery is left out of the equation.

Table A-3: Domestic pelagic fishery landings in the Council region in metric tons, 1998. Source: WPRFMC, 1998a.

F: 1	Area (landings in metric tons)					
Fishery	American Samoa	Guam	Hawai'i	CNMI	Total	
Longline	401.05	0	12,961.40	0	13,362.45	

³U.S. purse seiners, usually based outside the region (but delivering catches to canneries in American Samoa), fish in the Pacific Remote Island Areas. This fishery is not considered here because the Council does not have management authority over the fishery when it is fishing pursuant to the South Pacific Tuna Treaty.

Troll	11.46	370.62	992.46¹	87.35	1,461.89
Pole-and-line	0	0	315.70	0	315.70
Handline	0	0	481.721	0	481.72
Other	0	0	598.29	0	598.29
Total	412.51	370.62	15,349.56	87.35	16,220.04

MHI only